Significant improvement of severe low back pain after breast reduction surgery due to macromastia, a case report

Case Report

This is a 69 year old female with a five year history of low back pain with progression. She denies any trauma or repetitive movements. She had a MRI of the lumbar spine that showed only mild spondylosis, mainly the facet joints. She tried conservative measurements including medications, various courses of physical therapy and interventional pain management that included facet joint blocks with no help. She came to our outpatient Physical Medicine and Rehabilitation clinic were she was evaluated and was found to have macromastia. She had a double gg breast cup. She was referred to plastic surgery for an evaluation for a functional breast reduction surgery. The surgeon agreed that the biggest component of the patient's low back pain was the oversized breasts. After insurance authorization she underwent breast reduction surgery. She was followed up 2 months after the surgery in PM&R clinic and she reported 100% improvement in the low back pain. She was pain free and was not taking any medications . See Figure 1



Figure 1. Pre and Post breast reduction surgery

Key Findings from the Literature

How does volume resection relate to symptom relief for reduction mammoplasty patients? Strong, B. Hall-Findlay E. How does volume of resection relate to symptom relief for reduction mammoplasty patients? Annals of Plast Surg 2014;00:00,1-7.

Reduction mammoplasty is well known to produce improvement ion a wide range of symptoms associated with macromastia. In this study, nine symptoms were evaluated pre and post operatively. These included: Back pain

- Shoulder grooves
- Breast pain
- Rashes under the breasts

The study included 410 patients . In conclusion, reduction mammoplasty had a positive impact on a range of symptoms regardless of lower volume resections.

In this study 188 patients were operated and there were no significant difference in pre and post operative macromastia related symptoms based on the size except for low back pain. This study demonstrates that women seeking breast reduction have a similar preoperative symptom burden across a wide range of breast sizes.

What is the effectiveness of surgical and nonsurgical interventions in relieving the symptoms of macromastia? Collins E, Kerrigan C, Kim, M, Lowery J, Striplin, D. The effectiveness of surgical and nonsurgical interventions in relieving the symptoms of macromastia. Plast Reconstr Surg 109:1556,2002

Breast hypertrophy has a significant impact on women's health status and quality of life as measured by validated and widely used self-report instruments including the SF-36, MPQ, MBSRQ and EuroQol. In women presenting for surgery, nonsurgical measures including weight loss, physical therapy, special brassieres and medications were not effective in providing permanent relief of breast related symptoms. In contrast, both pain and overall health status were markedly improved by breast reduction, essentially restoring functional status to that of age-matched norms.

Eleven women participated in this study. Measurements were done 60 and 90 days pre and post-op. Commercial available posture analysis software was used . Following mammoplasty, an improvement in body posture, primarily in the alignment of shoulders, trunk and pelvis, and a decrease in pain in the upper limbs and spine, were observed.

What are the functional capacity and postural pain outcomes after reduction mammoplasty? Freire M, Neto, M, Garcia E. Functional capacity and postural pain outcomes after reduction mammoplasty. Plast reconstr. Surg. 2007. 119:1149-1156

One hundred patients were chosen. 50 were placed for immediate surgery and 50 on a waiting list. The HAQ-20 questionnaire was used to asses functional capacity. 46 of 40 patients from both groups completed the study. The functional capacity improved only in the patients that underwent reduction mammoplasty, demonstrating that surgery is a tool to reduce back pain in patients with macromastia.





• Neck pain

- Headaches
- Exercise intolerance
- Lack of self-esteem
- Poor posture

Outcomes after breast reduction. Does size really matter? Spector J, Singh S, Karp N. Outcomes after breast reduction. Ann plast surg 2008;60:505-509

Does reduction mammaplasty improve body posture and decrease the perception of pain? Goulard R, Detanico D. Reduction mammoplasty improves body posture and decreases the perception of pain. Can J Plast Surg. 2013. 21:29-32

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Conclusions

After reviewing more than 15 articles from the peer-reviewed literature, the main conclusion is that breast reduction surgery is effective in reducing the low back pain in women with macromastia and increases their functional capacity. Something that is clear is that there is a huge impact in symptom reduction despite the volume of resection in all the patients investigated.